

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

-1- (Currently Amended)

1 A mesostructured crystalline hydrated alumina
2 composition consisting essentially of a boehmite,
3 pseudoboehmite and mixtures thereof selected from the
4 group consisting of gamma alumina, boehmite, and mixtures
5 thereof and exhibiting at least one low angle x-ray
6 diffraction line corresponding to a lattice spacing of at
7 least 2.0 nm and multiple wide angle x-ray diffraction
8 lines with CuK α radiation wherein λ is 0.1541 nm
9 corresponding to an ordered lattice comprised of oxygen
10 atoms and hydroxide groups with aluminum in interstitial
11 positions within the lattice, wherein the surface area is
12 at least 200 m²/g; and wherein the pore volume is at least
13 0.40 cm³/g.

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Claim 2 (Cancelled)

-3- (Currently Amended)

1 A mesostructured crystalline hydrated alumina
2 and organic modifier composite composition wherein the
3 alumina composition consisting essentially of a boehmite,
4 pseudoboehmite and mixtures thereof is selected from the
5 group consisting of gamma alumina, boehmite, and mixtures
6 thereof and exhibits at least one low angle x-ray
7 diffraction line corresponding to a lattice spacing of at
8 least 2.0 nm and multiple wide angle x-ray diffraction
9 lines corresponding to an ordered lattice comprised of
10 oxygen atoms and hydroxide groups with aluminum in
11 interstitial positions within the lattice.

-4- (Previously Amended)

1 The composition of Claim 3 wherein the organic
2 modifier component is a non-ionic surfactant.

-5- (Previously Amended)

1 The composition of Claim 4 wherein the
2 surfactant is selected from the group consisting of a
3 polyethylene oxide block co-polymer, an alkylene amine;
4 an alkylene polyamine, a polypropylene oxide amine, a
5 polypropylene oxide polyamine and mixtures thereof.

-6- (Previously Amended)

1 The composition of any one of Claims 3, 4 or 5
2 wherein the hydrated alumina component is boehmite.

-7- (Currently Amended)

1 A mesostructured crystalline transition alumina
2 composition comprising gamma alumina selected from the
3 group consisting of gamma alumina, boehmite, and mixtures
4 thereof and:

5 wherein the composition exhibits at least one
6 low angle x-ray diffraction line corresponding to a
7 lattice spacing of at least 2.0 nm and multiple wide
8 angle x-ray diffraction lines with CuK α radiation wherein
9 where λ is 0.1541 nm corresponding to an ordered oxygen
10 atom lattice with aluminum in interstitial positions
11 within the lattice, wherein the surface area is at least
12 200 m²/g; and wherein the pore volume is at least 0.40
13 cm³/g.

-8- (Currently Amended)

1 The mesostructured transition alumina of Claim
2 7 wherein the transition alumina consists essentially of
3 comprises gamma alumina.

Claims 9-26 (Withdrawn)